

Week 4 Lecture: Views of Science (Under the Microscope)

Because science and the history of scientific thought is probably something most of you will feel more comfortable with than religion, I will keep the science portion of my lecture fairly brief this week. This lecture will also include some notes on reading for **plot**, which will connect to your reading questions about Hawthorne.

Thoughts on Science



Do we have any trouble recognizing the “mad scientist” [pictured](#) to the left? He has the crazy eyes, the bubbling test tube, wild hair, not enough fingers, and a lab coat. What else do we need? Think, before we begin, about how often the mad scientist motif shows up in our culture. They seem to be lurking under every building and in every spooky house...

To continue my thought experiment that complements our picture above, think further about every movie (or video game) that involves a doomsday scenario. Most of these involve a plot where scientists, mad with godlike power, altered human genes or created the ultimate weapon or brought machines to life, turning humans into batteries (like *The Matrix*). Some of you could even be science majors and, looking around some of your classrooms, point out those few who give the sciences a dangerous name, with their muttering about chemical warfare or the creation of an AI in the near future.

While most of us benefit on a daily basis from the fruits of the scientists’ labor, each phase of scientific discovery is generally coupled with fears of what new discoveries could

unleash. In part, the comic book industry was spawned to accommodate for larger than life characters who generally (when not aliens) came about because of scientific mishaps or evil plots. Radiation (in the 20th Century) plays a large role in this, mirroring the creation and use of the atomic bomb. Thus, while we know that science does bring positive benefits to humanity, we also fear the unknowns that science always seems poised to unlock or stumble upon.

Speaking of atomic bombs, [here](#) is a picture to get your attention. Trying to imagine what these bombs do may exceed human ability and understanding. And we fear what we don't understand.



Science and Literature

Of course, because this is a literature course and not a course in the history of science, we should focus on what happens when the two meet. In some senses, science and literature find themselves opposed in professional settings, as one field of study purports to study “truths” and one to study “lies” that we tell ourselves about these truths (I won’t tell you which discipline does which). Literature is, at some level, about representation and experience, how humans tell stories and describe the world, and the themes and messages that emerge. Thus, if you turned in a “creative” lab report in chemistry, you would probably fail the class. The attitude of science towards knowledge is generally one of [empirical](#) pursuit, where the evidence must exist and experiments must be real and repeatable. As a result (and I can already hear some of you

groaning), these two types of thinking don't always get along (which leads to science students complaining about literature classes and literature students moaning about science classes). For our purposes, we aren't here to cast stones, but to see what happens when science enters the realm of literature.

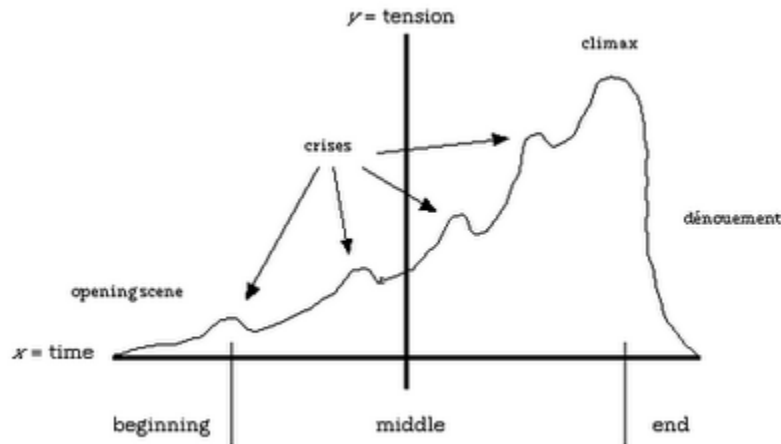
Our readings this week come in two kinds. We have the poets, who generally relate a direct experience of the world (or a reaction involving feeling). Each poet responds to science in a specific way, though generally by comparing the experience of science or scientific thinking to others kinds of experiences and ways of seeing the world. In the stories, however, we have more chance to see science in action, both its motives and its results. As you can probably guess if you haven't read, these stories don't treat normal scientific day-to-day experience. To get at a heightened experience, authors generally push past the ordinary to present **the extraordinary**, which can bring our attention to the underlying issues of everyday life. Though in very different ways, Hawthorne and Pynchon attempt to take science to logical (but frightening) conclusions, mostly concerning what happens to our humanity and to us as humans.



Aren't humans generally mystified but made uncomfortable by the strange creations we find in nature? There is something enchanting about odd creations, especially if they have abnormal properties. So, of course, when humans create these things themselves, other humans get nervous.

Reading Stories for Plot

An important aspect of reading stories that I didn't mention last week is plot. Here is a diagram that is commonly used (in a less complex form) to explain how plot generally works:



Note that the tension in stories generally rises fairly constantly throughout, ending with a climax and resolution. While this doesn't happen in all stories, we could call [this](#) sort of Story Arc 'typical' of short fiction.

Following the above diagram loosely, stories are generally divided into **five parts**:

- 1) Exposition – the introduction to the story, characters, and tension. In some stories, exposition takes up a large portion (setup), but in others it is largely non-existent.
- 2) Rising Action – following our chart above, the rising action is the period of increased tension (including small crises along the way) that leads to the climax.
- 3) Climax – the key moment in the story, when the major plot tension comes to a head. In the Hawthorne story, for instance, the climax comes close to the end and involves someone drinking something out of a “small silver vase.”
- 4) Falling Action – in some stories, after the climax there will be a period of falling action, working out the aftermath of the climax.
- 5) Resolution – if we are lucky, a story can end with a clear resolution that helps everything wrap up neatly. Sometimes, we don't have that luxury, however. In Hawthorne, our resolution comes from the mouths of both Beatrice and Dr. Baglioni. In Pynchon, as in most more contemporary stories, the resolution is harder to pinpoint.

Note: The term denouement, which our diagram above uses, is applied to both the falling action and the resolution, since it literally means the untying/unraveling of the plot into a final conclusion. Since the falling action and resolution usually cover only a short period of time, you can feel free to think of them as one part of the story if you want, which would make this term useful.

After a page of explanation, I want to note that the idea of the story arc is merely here to guide your reading, because it gives you **a system** to comprehend stories within. For our purposes, however, we are more interested in events and situations that move the plot forward, or **plot points**. Using the reading questions for Hawthorne, I tried to point along the way (in a detailed fashion) where to look for major plot events, so that you can see how things move forward. “Rappaccini’s Daughter” balances the plot of the young man in love with the plot of the mad scientist. As you read, keep an eye on how both plots are developed together as the story moves towards its climatic moment. To understand what gets critiqued and why (especially the attitude towards science), understanding the plot lets you see how Hawthorne leads us forward.

You can also keep your eye on plot devices, like the “small silver vase” that Baglioni gives to Giovanni or the secret entry to the garden or meeting Rappaccini in the street. These events and objects move the action of the story forward, leading us on to our conclusion. When we read stories at our level, we are concerned with understanding both what happens and why. To switch to Pynchon for a moment, what is the significance of the small bird? How does the life of this bird drive part of the plot forward? Our goal, in terms of plot, is to be able to say what happens and to note the important moments, objects, or people that move the plot forward. To return to Poe for a moment, finding the second black cat at a crucial moment gets our drunken narrator to fixate on a new trouble, leading to his eventual death.

Overall, reading for plot is keeping track of the action of the story, how it builds up towards a climax, and how the tension of the story gets resolved. As we proceed and start to read more stories (not to mention the novels), plot will be an important starting point, along with point-of-view, setting, and character, for how we orient ourselves to the work and, ultimately, to how we read it.

Resolution (if you will)

This week, you will focus on both the theme of science along with how authors react to it and to the plot of our stories, to see how they work. Please remember to complete your Discussion Board entry, including any questions or concerns you are having with these ideas.

We will end with an optional moment of zen, a link to a cartoon mocking the mad scientist.

Enjoy if you choose: <http://www.youtube.com/watch?v=KQxzcBYwNc>